Modified Combine Does Two Jobs At Once

An ingenious Nebraska rancher has merged his corn harvesting and stover harvesting into one operation. By modifying his combine to do two jobs at once, he eliminates a second trip to the field to harvest stover and doesn't leave a lot of valuable feed in the field.

Karl Hueftle, of Cozad, Neb. has been harvesting this way for many years. His Deere combine is equipped with a special row crop head with rotary knives that cut the corn plant about a foot above ground and feed the entire plant — ears, stalks and leaves — into the combine.

Shelled corn feeds into the hopper in the conventional way, but the stalks and other plant material go to the rear of the combine where a conveyor moves it out into the waiting arms of a forage chopper that is being pulled alongside.

The chopper has a metal sheet that catches all the stover and feeds it into an auger so nothing is lost.

"I harvest about 7 tons of stover per acre with this setup, which is two to three times better than with a conventional system," Hueftle told FARM SHOW.

The large amount of material going into the combine affects the way the equipment works. Hueftle uses only four rows of a five-row header to cut down on the volume of plant material. His 150 hp combine is equipped with a milo or sorghum header.

"I don't see why this system wouldn't work with any machine that shells and threshes," he says. "In fact, the new bigger combines that can handle more material should be able to use the full capacity of the sorghum header."

While this harvesting operation may seem complicated, it works faster and takes less labor than conventional methods. A harvest crew consists of a combine operator, one chopper operator, grain trucker and silage trucker. It's a non-stop operation except to dump the grain hopper. There's been almost no mechanical trouble, explains Hueftle.

He likes the system because of the time saved and the increased volume and quality of feed he is able to harvest.

For more details, contact: FARM SHOW Followup, Karl Hueftle, Cozad, Neb. 69130, (ph 308 784-3251).

Mobile Trailers Make Ideal Sheep Barns

A central Illinois farmer raises his lambs in a predator-free and worm-free environment that gets them off to market in four months.

That may sound like the Shangri-La of the sheep world, but it's made possible by a simple housing idea. The sheep are raised "off the ground" in mobile trailers.

Marshall Short and his son, Dennis, of West Point, Ill., put their flock on wire mesh floors in trailers about five years ago. It was an idea that Dennis brought home from the agricultural experiment station of the University of Illinois, at Dixon Springs.

The two trailers (40 by 12 ft., and 60 by 12 ft.) were built of plywood on chassis bought for about $150 each. The floor was constructed of treated 2 by 4's covered with 9-gauge, ¾ in. mesh expanded metal. The side boards of ¾ in. plywood are hinged at the top so they can be opened in warm weather for ventilation. Total cost was about $1500.

"The result was a confinement building that's coyote-proof, worm-proof, and clean," says Short. "A waterer is placed at one end and a feeder at the other end of the building, and there's practically no feed wasted."

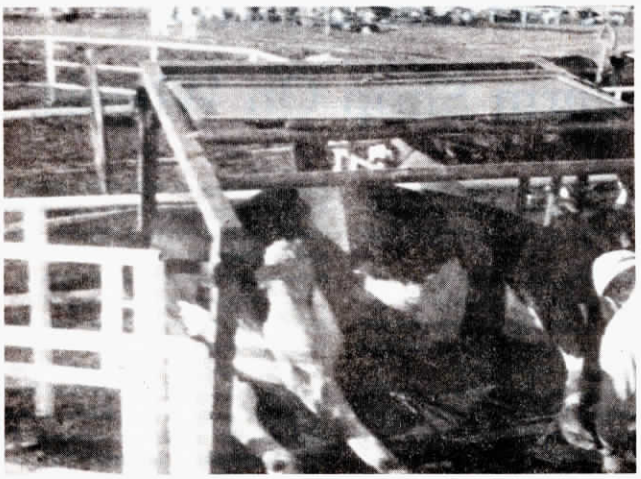
When the manure builds up under the expanded metal floors, Short hitches his tractor to the trailer and moves it forward to a new location. The manure pile is easily loaded and hauled out.

Short's ewes lamb on pasture the year around. They are of Dorset and Rambouillet blood so they will breed spring and fall. After lambing, ewes and their lambs are brought into one of the trailers where they stay until the lambs are weaned. Then the ewes go back on pasture and the lambs are moved to the second trailer until they're ready for market in another two months.

The trailers hold about 75 ewes with their lambs at one time. During the cold months, the lower part of the trailer is banked with baled straw on the north and west sides to keep cold drafts from coming up through the mesh floor. In summer, when the side panels are open, the air moves through the trailer and keeps it cool.

Short also markets hogs and calves from his farm, but he has not used the mobile housing for them. He's sold on the idea for his sheep flock, though.

"The lambs get off to market faster than pasture lambs because there are few disease problems, no mud, and no predators," he told FARM SHOW.



Home-Made Hoof Trimming Stall

Hoof trimming can be one of the toughest jobs on a dairy farm, but a California dairyman has created a simple solution. John Santos, of Tulare, has designed and built his own hoof trimming stall.

The sheet metal stall is basically adapted from a feed wagon box. The foundation is anchored in concrete and the stall is moved by the hydraulic system of a tractor.

"We put ours together four years ago out of sheet metal, angle iron, pipe and cable for about $200," Santos told FARM SHOW.

To do hoof trimming, the cow is moved into the stall and two web belts are tightened underneath her belly. Four chains hold each leg in place. Then, the tractor's hydraulic system slowly tips the stall on its side, exposing the feet for trimming. Santos says a complete trimming job takes 15-30 min. per cow, depending on the treatment required.

After trimming, the hydraulic system tips the stall back to an upright position, the straps are released and the cow walks out.

The Santos herd of 375 milk cows is in frequent need of hoof trimming, or treatment of foot problems. With his own trimming stall, Santos can do the job whenever it's needed rather than waiting for a portable trimmer to become available. He says he uses his trimming stall about 30 times a year.

For more details, contact: FARM SHOW Followup, John Santos, 4363 Ave. 232, Tulare, Cal. 93274 (ph 209-686-6011).

Windrower Attachment Saves Straw, Stalks

"It started out as a method to save fuel by cutting the number of harvesting trips in half. But it ended up as a way to also increase the feed value of salvaged straw and chaff," says Grant Gulleson, Rutland, N. Dak.

Gulleson is talking about an attachment for his combine that he designed and built himself. It is a conveyor that collects the straw and drops it into one large windrow instead of two small ones, thus saving half the trips in harvesting grain.

The big windrows are ideal for machines that make big round bales.

The added benefit that Gulleson discovered was that this baled straw had higher feeding value when fed to cattle. The reason is that the conveyor catches chaff and light kernels of grain that would otherwise drop on the ground and be lost.

Major components of the attachment are a heavy sheet metal trough, an auger, and a chain strap conveyor. The conveyor carries chaff from the sieves to the auger where straw and chaff are mixed while being carried off to the side. The nutritious chaff and light grain are held in suspension in the straw until it is picked up by the baler, stacker or chopper.

Gulleson says the attachment also improves value of corn stalk residue when combining corn. It salvages leaves, husks, and cobs that would otherwise be lost by mixing them with the corn stalks before they are baled.

Gulleson winters his herd of 75 beef cows on the baled straw and corn stover. He custom builds the windrowers, which are available for most any make or model of pull type or self-propelled combine. Cost of the attachment is about $800.

For more details, contact: FARM SHOW Followup, Grant Gulleson, Route 1, Rutland, N. Dak. 58067 (ph 701 724-6201).